GRUMMAN plane news

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Elect Vassallo V.P.

Phil Vassallo, director of Corporate Procurement Operations, has been elected a vice president of Grumman Aerospace. While announcing the election of Vassallo, Chairman and President George Skurla touched on the increasing importance of Corporate Procurement Operations in the future outlook of the company. "Corporate Procurement Operations is responsible for the expenditure of more than 50 percent of all of our contract dollars, a total exceeding $500 million in 1975," he said. "How well we manage that part of our business has a decided impact on our profit picture. I'm very pleased with the group's recent performance and I'm looking forward to continued good work in the future."

Vassallo views that task from yet another perspective. "Corporate

Phil Vassallo

Procurement Operations has been a tough place to be these past couple of years because our people have had to contend with a severe economic environment among other problems. You can't always buy what you want when you want it because of shortages. High fuel and energy costs have tended to drive prices up. And our negotiations with our sub-contractors have become much more intense. Everybody wants to feel protected from the unexpected in an inflationary period.

"But getting the best buy possible is only part of our objective. Just as important is how cost-effective we are when we're doing it. We've been consolidating and streamlining our operation to make sure the company gets what it's paying for." That can be accomplished in a number of ways, not all of them visible on the organization chart. Some involve individual attitude, and that often is affected by a better understanding of the entire manufacturing process at Grumman, and how procurement fits into that picture. At least Vassallo has found that to be true.

"We're encouraging more and more familiarization tours for our people around the company to see what's happening, and to view firsthand what happens if a purchased part doesn't get to the production line on time. We're becoming more sensitive to the impact of procurement on the rest of the company. A late delivery might have only a small impact on us, for example, but a huge impact on manufacturing. And we're finding, too, that these exchanges give people in other parts of the company a better understanding of procurement and some of the obstacles we have to contend with. There's one thing I've found out while I've been working for Grumman. Whether you're working in engineering, manufacturing, procurement, or some other area, people seem to have the same common goal: dedication in wanting to get the job done."

Vassallo, who came to the company 18 years ago as a structural engineer, got his first exposure to procurement in the early Sixties when he travelled around the country as part of an engineering-manufacturing-procurement team that worked with potential suppliers for the F-111 and Lunar Module programs. Soon after, he moved into Machining Operations (he became director in 1970), and in 1973 was

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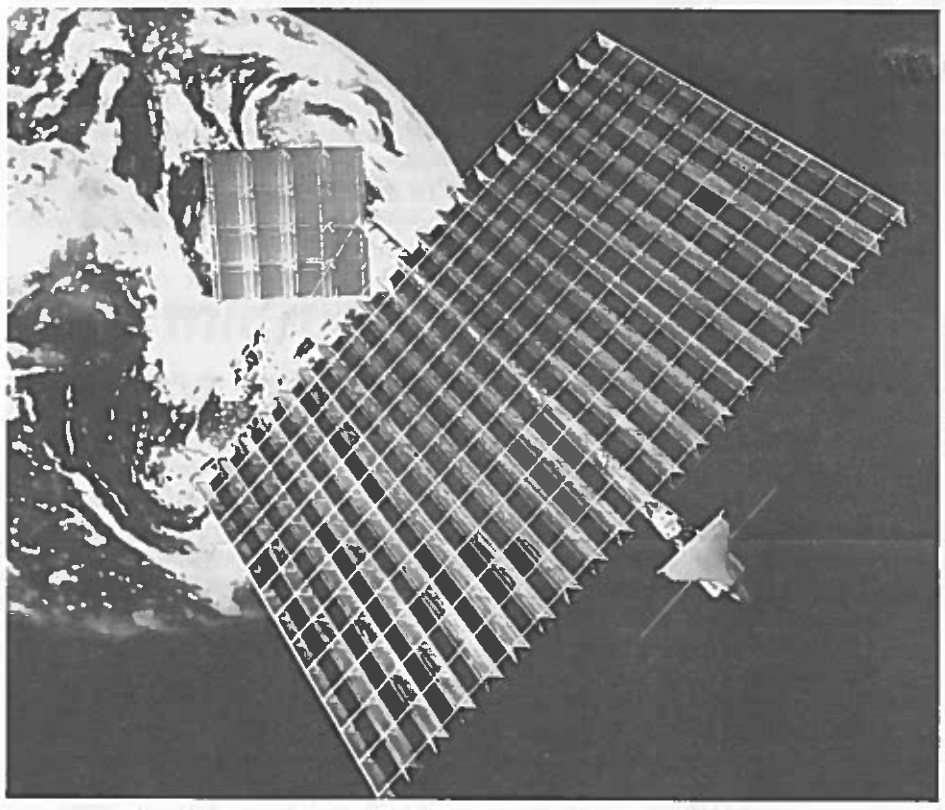

Solar Power Station. Grumman's selection earlier this year by the National Aeronautics and Space Administration for space-station systems analysis studies includes in the proposals this design for a modular space station, equipped to collect solar energy to generate and transmit electrical power to earth. The scale model pictured was constructed by the Plant 5 model shop and photographed by Presentations Services before it was put on display as part of the Grumman display in the "Third World America" exhibit at the Kennedy Space Center.

Capt. Bill Oldmixon heads Navy office

The past relationship between Grumman and the Navy has been "tremendously beneficial" to the country over the years, says Capt. Bill Oldmixon, USN, the new Naval Plant Representative at Grumman. He proclaimed that this relationship "still exists today" because the Navy has "obtained a great number of outstanding air weapon systems from Grumman in the past," and continue to, even today.

It will be Captain Oldmixon's primary duty to keep this Grumman-Navy relationship strong by assisting in the administration of the contracts that the Government and Grumman are involved with. Assisting him are 13 officers and about 240 civilians working in five general areas—Quality Assurance, Contracts, Engineering, Industrial Management, and Administration. They will combine to oversee the progress of all the Government contracts that involve Grumman, not just those for the Navy.

Since taking over as NAVPLANTREP on July 23, replacing

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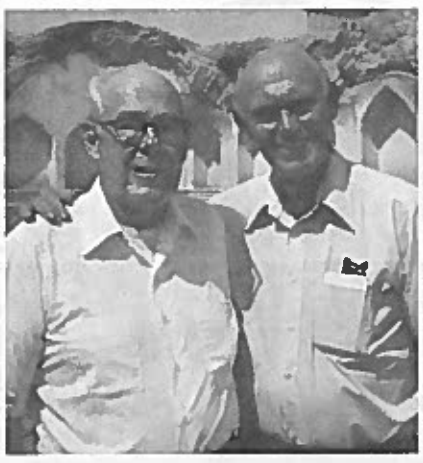
people

Thousands of miles away, in the far-away city of Isfahan, Grummanites are living, working and playing much like their counterparts in the U.S.A., only under slightly different living



and climatic conditions (reported to be in the 100's in the shade).

During his visit to the Iran F-14 base, Bill Voorhest, special assistant to President George Skurla, passed on the company's best wishes to Charlie Buxton (pictured above left) who recently became the second person to retire from Grumman in Iran.

Charlie was director of Payroll in Bethpage before going to Iran, where he served as Finance Manager. Charlie and his wife, Marietta, plan to spend the remaining months of 1976 touring the Middle East and Europe.

Meanwhile, on the softball diamond (and what would a Grumman base be without one?), the Grumman Hellcats just completed a 22-0 undefeated season in the 18-team Isfahan Softball League and enter the league playoffs with high hopes of defeating the seven teams representing other American companies in Iran.

The F-14 Community Services bulletin **Tomcat's Tale** reports that plans are underway for the first annual GAC Family Picnic in Isfahan. The F-14 Fourth of July picnic was such a huge success that plans were immediately made to reserve the Iranian Youth Center for the picnic, scheduled for Friday, Sept. 17.

Hats off

Grummanites in Quality Control departments were recently cited for their continuing support by the Suffolk Development Center for the mentally retarded at Melville. The Grumman contingent received the organization's voluntary award citation.

It all started eight years ago when Quality Control personnel decided to stage a fund raising campaign instead of exchanging holiday greeting cards. After two years of contributing to local charities, campaign organizers Mike Vecchia and Mike Allegra heard that the Development Center needed such items as rocking chairs, motivational games, and other types of personal necessities. After each drive, they would contact the Center, find what was needed, buy the items and deliver them to the Center.

According to Vecchia, as the economic pinch increased its grip on the Center's operation, Grumman's generosity grew. This year, with the moneys left over from the last holiday drive, the group returned at Eastertime with more gifts.

Should you want to add your support, call Vecchia on Ext. 2491.

Meritorious Medals

The United States Air Force reserve recently bestowed Meritorious Service Medals on two Grummanites—Lieutenant Colonel Vincent Gonzales and Major Louis G. Kaufman II.

Gonzales, a program engineer for Facilities Engineering in Plant 30, served as a Reserve Assistance Officer to the Northeast Region Headquarters of the Civil Air Patrol from August, 1973 to June, 1975.

Kaufman performed as research engineer in the Theoretical Aerodynamics Research Laboratory, Aerospace Research Laboratories, at Wright-Patterson Air Force Base, Ohio, during annual two-week reserve active-duty periods from August, 1968 to January, 1975. He is employed as a staff scientist in the Plant 35 Research Department.

Grand tour...

When the Grumman Retirees Club was planning a tour of eastern L.I., Calverton Operations was included in the day's itinerary.

Over 100 retirees were given the grand tour of the facility which included a look at the Plant 6 production line and the anechoic chamber. As a bonus attraction, the group was treated to a fly-by of an F-14 Tomcat before they departed for lunch at the Oyster Factory in Greenport.

Later that day, retiree Val Draper and his wife Mary, local residents of Shelter Island, provided their fellow retirees with an historical commentary on their community.

Stamp of success

Since January, 1975, the Grumman Stamp Club has been collecting cancelled stamps and sending them to the Pilgrim State Hospital and Sagamore Children's Center for use in their occupational therapy programs, according to Stephen Hoops, stamp club president.

"The participation has been quite good," he writes, "with many pounds of stamps being sent to the institutions during the last year-and-a-half of the drive."

Recently, the club received a certificate from the Sagamore Children's Center thanking Grumman for its "cooperation, dedication, support and assistance," which the club wanted to pass along to all Grummanites whose "continuing contributions have made this program a success."

To participate in the program, simply rip off the corners of your mail with the stamp attached (don't rip the stamp off by itself) and send them to Stephen Hoops, Plant 12, Dept. 0445. The program is an ongoing endeavor by the Grumman Stamp Club and any and all stamps are needed.

Appointments

Among those who recently received changes in assignments are: Joseph G. Smith, deputy director F-14 program; George Newman takes over as deputy director at Mugu; succeeding him as director of Pt. Mugu Ops. is Charles H. Brown; Kenneth G. Koehler, program manager of the Satellite Attack Warning System (SAWS) Program; in DEPARTMENTAL OPERATIONS — Integrated Logistics Support, Arthur Granata, project leader, CSDC, AICS, & CADC, F-14; and Edward J. Long, section head, Technical Services; MANUFACTURING — Louise Coleman, planning manager, Composite Structures; and Robert Harvey, manager, Resources; RESPONSIBILITY CENTER — Richard Mosco, foreman, Paint Shop; and Joseph Eder, assistant foreman, Prototype, both of Pl. 2; and in CALVERTON OPERATIONS — Barry LaVallee is appointed manager of the ECM Radar Site, in addition to his present duties as site manager of the Anechoic Chamber. Ted Hammen is appointed Certification and Training manager, in addition to his present responsibilities.

Double vision. Throughout their careers, Frank (L) and Roy Gilmore have been confusing their fellow workers. Though the twins haven't always worked in the same department, they are presently assigned to Shipping and Spares, Plant 6. Both men recently marked their 25th year at Grumman–Frank started one week after Roy began in July 1951. Dual congrats! (Photo by Gerry Costello)

New NAVPR at Bethpage

(Continued from page 1)

Capt. Richard Wilson (who has since moved on to become director of the avionics division at the Naval Air Systems Command in Washington, D.C.), Capt. Oldmixon has found his first month on the job both "exciting and interesting."

During a one-week "turnover" period with Captain Wilson, Oldmixon was briefed on the day-to-day activities of the NAVPLANT-

Capt. Bill Oldmixon

REP. "This is not to say that I learned it all in that week," he said, "but I was given a good idea of the office and its functions."

Born and raised on Staten Island, Captain Oldmixon graduated from the Naval Academy in 1954, and from there, went on to flight training, with squadron tours in Patuxent River, Maryland, and Brunswick, Maine, and ship duty in Norfolk, Virginia. From 1960 to 1963, he attended Navy Post Graduate school and received his M.S. in Aeronautical Engineering from Princeton.

Not a total stranger to Grumman, Captain Oldmixon spent two months during his post graduate work at the Bethpage facility, familiarizing himself with aircraft industrial practices. He worked in Flight Dynamics with Norm Lewin and found his brief stay here "tremendously educational." Above all, he said, it gave him a better feel on how the company operates.

For several years, he served as an Aeronautical Engineering Duty Officer at the Naval Air Development Center, and at the Naval Air Rework Facility in Rhode Island. For the past two years, he was stationed at the Naval Air Systems Command in the Avionics Division as program director for ACLS (Automatic Carrier Landing Systems).

His flying experience includes numerous hours in Grumman's S-2 Tracker aircraft, and the E-2C, in which he plans to accumulate his required 100 hours of flight time each year. He also said he plans to familiarize himself with the A-6 and F-14.

Preparing to "lead and coordinate" the Naval Plant Representative Office in Plant 35, Captain Oldmixon has settled in Garden City with his wife Sue and their five daughters and one son. As NAVPLANTREP, Capt. Oldmixon will remain here at Grumman for at least two years.

Ready for updating. The first Navy TC-4C Flight Trainer is delivered to Calverton for updating in a new A6 Program contract agreement for modification to the operational modes of the A6E All Weather Weapons System. Receiving the aircraft from VA-42 pilot Lt. Scott Thomas are TC-4C manager John Alber (2nd R), and Don Schmidt, TC-4C FAD coordinator. Other members of the crew who flew in from NAS Oceana, Va. are Lt. Lynn Brooks (L) and ADJ2 Jim Williams.

Elect Vassallo V.P.

(Continued from page 1)

named deputy director of Manufacturing Operations, a post he held until his assignment to Corporate Procurement Operations in 1974.

Corporate Procurement Operations is viewed by Vassallo as being like a "window on the world for Grumman, one through which the company looks out, and one through which the world can look in. And I'm talking not only about the business world, but the world in general." Because Grumman spends about $250-$300 million in purchasing goods and services in the Metropolitan New York area, he believes more and more people are beginning to realize the tremendous impact Grumman has on the local economy.

Part of Corporate Procurement Operations task, Vassallo points out, is to generate the same sense of dynamics and emotional involvement to the outside world as he sees developing within the company. "We're trying to demonstrate to our outside world that we and they must have the same enthusiasm that exists throughout the company. The first price we get isn't good enough. We've got to do a better job of procurement. And it's improving—we've been getting better cooperation and prices."

Vassallo's itinerary often lists trips around the country since Grumman has sub-contractors in most of the 50 states. And while the company deals with very small and very large companies—about 6,000 in all, Phil points out that Grumman has demonstrated a growing commitment to minority business firms as well.

Phil lives in Bethpage with his wife Mae and their daughters Susan, 16, Marie, 14, and Andrea, 10. One of the happiest Grummanites to hear the news late last Thursday was Phil's father, Charles Vassallo, who works in the Model Shop in Plant 5.

New microfilm aperture card service now available at Pl. 25

Grumman Aerospace now has the in-house capability to economically mass produce 35mm microfilm aperture cards (IBM cards containing microfilm). This new service became available as a result of a recent Navy contract the company received to prepare and direct shipment of microfilm aperture cards of Grumman drawings to Naval Air Rework Facilities (NARFs).

In order for NARFs to overhaul and update fleet aircraft, they need up-to-date engineering drawings of Grumman aircraft. Previously, these drawings were supplied by the Naval Air Technical Services Facility (NATSF) in Philadelphia. NATSF acquired the drawings from Grumman in microfilm rolls, then reproduced the film, converted it to aperture cards, and distributed them to NARFs. This process took several months.

After numerous meetings with the Navy and the company's Communication Services, Drafting Technology, Control, and Contracts departments, Frank Lagonigro and Andy Licari of Plant 5 Configuration/Data Management obtained Navy permission to prepare and direct distribution of aperture cards to NARFs directly from Grumman. The result is a one-year $62,000 contract, which according to Lagonigro, will be renewed annually.

The high speed IBM Microcopier/Reproducer used for this contract is located in the Plant 25 Reproduction facility. It reproduces the punched holes and the microfilm image of master aperture cards at a rate of 2,000 cards per hour.

While this new machine will be used primarily to fulfill the Navy contract, the new equipment does have excess capacity that can be used internally. It can be used for drawing file modernization and sorting and printing lists of data, such as vendor drawings and specifications, that are stored on aperture cards.

Contact Communication Services in Plant 30 on Ext. 86111, for more information on this new service.

obituaries

GASTON L. RICKS of Sub-Assy., Pl. 27, died July 21 at the age of 57. He had been with Grumman since 1964 and lived at 15 Sylvan St., Bay Shore.

HAROLD G. PRESTON of Inspect - QC, Pl. 77, died July 21 at the age of 59. He had been with the company since 1963 and lived at 911 Savannas Pt. Dr., Highpoint, Ft. Pierce, Fla.

BARBARA SIGNORELLI of Mgmt. and Staff, Pl. 6, died July 25 at the age of 39. She had been with the company since 1973 and lived at 3004 Watch Hill Ave., Medford.

CHARLES F. LEHMAN of Tool Shop, Pl. 77, died August 4 at the age of 53. He had been with Grumman since June 1976 and lived at 301 W. Whitney Dr., Jupiter, Florida.

Personal

My family and I would like to thank all the people in Plant 2 for their thoughtfulness and consideration during my illness.**Ellen Brenner**

One of the nicest things about retirement was the grand send-off given us by our many friends at Grumman Aerospace and NAVPRO. Helen and I are very proud to have been associated with such wonderful people. Thanks and God bless. **Hank and Helen Grack.**

Field service reps — paragons of deportment and diplomacy

WHIDBEY ISLAND, WA.—Working closely with the customer is something Bob McNeill has been doing since he became site manager for Grumman Aerospace at the naval air station here some nine years ago, and to hear him tell it, he's never been happier. When that customer operates upwards of 160 aircraft produced by the company—Whidbey is populated almost exclusively with Grumman A-6E Intruders and EA-6B Prowlers—it takes more than the eloquence of a silver-tongued orator to keep him happy.

As a starter, the tasks demand all of your working hours and some of your free time, too, since emergencies are an expected part of the assignment. In addition, it requires a staff that views the job as seriously as you do and has the wide range of technical talent to back up that concern.

Bob McNeill

McNeill sees his associates on the Grumman team at Whidbey as a very special breed. Though they operate far from Bethpage (and the immediate access to support services there), Field Service representatives are expected to be experts on a broad technical front and serve as good-will ambassadors with their naval counterparts as well. There are certain monetary inducements and the added lure of world travel, of course, but being a company rep in the field isn't always the cushiest of assignments.

As Bob points out, Grumman reps are expected to be diplomats, tacticians, professionally respected, able to take criticism in stride yet sensitive enough to detect potential trouble spots, aggressive (but not overly so)—in other words, paragons of deportment and diplomacy. And, naturally, they must come equipped with the knowledge to offer assistance in such diverse areas as fuel and weapons systems, electronic countermeasures, computers and radars, structures, logistics, and more. As McNeill puts it, "To know all that, you need a 50-pound head." And there's more. A rep must be willing to leave family and friends to go to sea with an Intruder or Prowler squadron for upwards of six months before returning home, and then after another six to eight months ashore, be ready to go to sea again.

The field service rep *is* a very special breed...perhaps even a dying breed, says McNeill. Over the past 10 years or so, the government has been replacing many contractor representatives with civil service personnel, a situation, as Bob describes it, "Where we're constantly fighting the battle to keep our people in the job and not lose them. And with good reason. We have that direct tie-in with our own engineering and production and the on-the-job experience that's hard to match. Why, some of our senior reps have upwards of 25 years' experience. They can examine a cracked tail-pipe, for example, and tell you immediately if it can be repaired or has to be replaced. Sometimes that can save the Navy thousands of dollars just by being able to answer that question on-the-spot.

"Some of our reps are as good on the podium as they are actually working on the aircraft. One just got back from a month on the carrier Midway in Japan where he gave all of their air crews and maintenance people refresher updates on the A-6 weapon system. He's highly thought of, very competent, and a gentleman. A real plus for Grumman. I tell you, our field service reps are worth their weight in gold."

On the other side of the coin, McNeill acknowledges that the company has a continuing responsibility to the Navy to make sure that there are no boondoggles—in other words, situations where a company assigns more people than are necessary to do a particular job in the field. One way Grumman guards against that situation developing, even inadvertently, Bob says, is by keeping communications open between Bethpage and Whidbey so that no special teams can be dispatched to the coast until it has been determined that the task can't be completed on the scene without help from another area.

Transcontinental Communication is sometimes easier said than done. There's a three-hour time differential between the east and west coasts so that when Grummanites arrive for work at Whidbey it's already 11 a.m. in the east. That narrows the window for telephone conversations considerably. When you subtract the time for lunch at both locations, the actual period available for transmitting messages is about three hours a day.

In all, Grumman has 33 persons (one a lady) permanently assigned to the air station here. Besides being site manager for the company, McNeill heads the technical representation assigned to A-6E squadrons, while Jerry Markham acts in the same capacity for those reps working exclusively on EA-6Bs. Ralph Kaiser is responsible for all airframes and Ron Hanson for all special support equipment.

Working so closely with their Navy counterparts—often living in the same neighborhood and even engaging in some social function with them—calls for a special type of relationship. But after the friendly badinage has been exchanged, the coffee downed, and the latest sea stories swapped, McNeill says that he and the other Grumman reps never lose sight of their primary task: Keeping the customer satisfied.

"If the admiral has a problem he doesn't feel he has to go to a vice president, or the president, to get it fixed. He calls us. That's why we're here...to support him and all of his people with whatever we need to get the job done. He doesn't want any excuses and we'd better not get ourselves in the position where we have to give him any. It's that simple."

letters

Dear Sir:

I do appreciate having the PLANE NEWS. Right off the bat, there was the JASDF (Japanese Air Self-Defense Force) article. At Yokota A.B. in 1957-60, when the Force was in its infancy and training with us, some members used to bicycle in on Base—all-weather, too. You never saw more earnest trainees in your life! It was good to see the present generation.

And how about the F4F at the Smithsonian restored by retirees (my stamp on its center section or electrical, I wonder?). Was my stamp 326? My badge, I know, was 28106.

Again, thanks muchly.

Regards,

Hope F. T. Zarensky (Mrs.)
Eastern Star Home
Oriskany, N.Y. 13424

Dear Sir:

Your new Overview was a step in the right direction. The article on politics was very timely and out in the open. In line with that thought, I am enclosing some thoughts touching on the problems of the last few months.

- Get people to vote—no pressure how to vote. People will come to realize the issues themselves.
- Make unbiased literature readily available and highly readable.
- Use various political contests and issues—local as well as national—as a means of motivating individual groups.
- Offer classes on Roberts Rules of Order to make people feel more confident at meetings.
- Equal time and attention to all sides.

These and other thoughts on topics of interest to employees were prompted by the feeling that this is a great company and everyone should know and feel a sense of pride in being a part of it. Financial support is necessary but the vote is essential—there are more than 20,000 voters here!

Very truly yours,

Anne M. Buford
Materials Accounting
Plant 30

Making do

Bob Willig of Quality Control—Technical Publications in Plant 34, is willing to swap some ideas about how his group preserves their working hardware. Aware of the high cost of all commodities, not only heavy machines and tools but even paper clips and staples, they've tried to keep expenses down even on small office items.

In use at Pubs is a discarded metal cigar container and cap that now doubles as a case for an Exacto knife. A cast off drugstore display that featured mascara has become a serviceable desk organizer, and neglected plastic containers and lids store paper clips and razor blades. Even unused plastic foam is put to work to skid-proof the bases of masking-tape holders.

Willig says he's sure that people in other departments also have good ideas for preserving and getting extra use out of equipment and believes it would be helpful to let everyone know about them.

A summertime taste of the 'real world'

(The following article was written by Brian Ballweg, a senior journalism student at Hofstra University, with photos taken by Susan Viemeister, a photography major entering the Pratt School of Art and Design.)

As hundreds of thousands of full-time college students completed their spring semesters at institutions across the country, the majority arrived home faced with one overriding problem—finding a job in an already overcrowded job market.

While some students can spend three eventless months surrounded by sun and sand, most try to secure any type of work. More often than not, it has nothing whatsoever to do with their college studies. But they must raise enough money to keep them going through school another year, only to be faced with the same problem the next summer.

Fortunately (to say the least), I have been among a group of several hundred others like myself getting a summertime taste of the "real world" at Grumman. After spending more than 12 years in a classroom, this small taste, of what to many students, is the first full-time employment, comes as a rude shock to some, and a positive outlook on the future to others.

My own job experiences at Grumman have ranged from electrical assembly to warehouse work and, finally this summer, journalism (my major). So I was curious to see how my contemporaries had fared.

Many of the summer employees probably didn't realize that one of the first people they came in contact with at Grumman was one of their own kind. Melody Hollen was the first student hired this summer, and one of her first responsibilities was helping to process the incoming summer employees at Plant 28. With a personality that seems well suited for personnel work, Melody spent her second summer at Grumman processing the applications of many people seeking jobs at Grumman. (Once, she says, even Grumman Aerospace President and Chairman George Skurla teasingly asked for a job.)

Having a mother or father working at Grumman is a common bond for summer employees because it is a well-known fact that summer hiring is done according to seniority in the company (excluding Grumman scholars). As Employment director Dan O'Brien explains it, all the summer job applications are placed in a stack according to the number of years the parent has in the company. Students whose parents have the most years to their credit are the first ones offered summer jobs.

The process continues until all the jobs are filled (this year, the cut-off came at about 20 years in the company). "The seniority system doesn't always keep everyone happy," says O'Brien, "but it is about the fairest way to distribute the jobs."

A major complaint among students is that they do not get placed in areas related to their studies in school. That's true in some cases, but not true in others (a brief sampling of 45 students showed about half of the students polled were working in an area related to either their major or personal interest).

Joe Austin, a chemistry major, spent his third summer at Grumman working the 3 p.m. to 11 p.m. shift on Security. He didn't seem to mind the job too much, except that working nights "doesn't leave much time for a social life during the summer." He also lost the opportunity to go to summer school, something he's been able to do in past years. But he did say that watching the gates or walking clock patrols gave him the chance to meet many other employees and work with plant protection people he described as being "really down to earth."

Several of the other students I talked to were not placed in compatible job areas. Denise Claro was given a secretarial job in Plant 39, even though she said on her application that she couldn't type. But while filling in for the secretary in her department, Denise said her bosses never pressured her, and that the job "could have been worse." Ellen Tashie, a journalism major working in Inventory Control in Plant 44 surmised that summer employees are hired to clean up extra work, and, as in her case, do work that would take time away from the other employees.

But in many cases, Grumman just does not have the kind of jobs to offer that would suit certain college majors. "Grumman had nothing to offer in my field, but they did the best they could," said Marybeth Shea, a Political Science major working in Corporate Budgets. David Cicale found his work in the research department interesting, but as a Food Science major, probably would not want to work here (he did maintenance and photo lab work his past two years). And Debbie Carter's day was split between the library and as a receptionist in various plants, quite a change from her usual Biology/Psychology studies.

But no matter how different the work may have been, a majority of those students polled said they enjoyed the work they did. What probably contributed most to this enjoyment was working with full-time Grummanites. The common expression seemed to be, "I love the people I work with." And many added that one of the best experiences they will take with them when the summer is over is that of working with, meeting, and getting to know full-time employees.

Out of almost 500 college students, however, I knew there had to be others besides my photographer and myself who were working in an area related to a chosen field. And in my small sampling of the work force I did run across a few.

Mary Cunniffe, an engineering major, was spending her second summer working in Quality Control, Plant 10. After running electrical tests last year, she now finds herself working with computers to determine whether X-ray pictures can be made sharper through use of computers.

Mary feels that she has not just been given work to keep her busy these last two summers. "The people I work with listen to what I have to say, and respect my opinion. It makes me feel like I'm needed." Mary pointed out that she was doing work at Grumman that she never learned in school, and that the experience would definitely be an asset. Her basketball game will also have improved after this summer, thanks to the lessons she has received at lunchtime from her fellow employees, whom she describes as being "super friendly."

Also working in Quality Control is Charlie Weizenecker, who is doing chemical analysis. He is studying pharmacy at St. John's and agreed that his summer work will definitely help his chemistry courses.

In a slightly different situation is Thomas Brown, an electrical engineer going to graduate school in the fall. He is working in Plant 14 doing simulation work with analog computers, gaining experience that he says will come in handy when it comes time to look for permanent employment.

Each year, Grumman awards engineering scholarships to high school students and also offers them the chance to work during the summer at Grumman. Eric Brown, Steven Wertheim, and David Vanderbilt are three scholars working in the research department in Plant 35. Eric said that the computer programming work he is doing is so up to date that when he reads about new programs in magazines, he usually finds that he's doing the same thing here at Grumman. This, he said, makes him feel relatively important.

"The people in this department are not looking for a straight eight hours of work from you. They are only concerned with what you produce," he said. "It gets down to a matter of trust with your fellow employees—they take your word for it."

What Dan O'Brien feels Grumman gets out of summer help most of all is good will for the company. "But the summer people do work—they work hard and honestly, and very few problems ever arise," he added.

For many of the students polled, this experience at Grumman is their first taste of a full-time job. After spending at least one summer here, most of the students said they would consider working here full-time after graduation.

What it does seem to offer most of all is secure employment for the summer months, and pay that one student said is "better than most summer jobs." This is probably the most important feature, because out of 45 students polled, 32 said that either some or all of their earnings would be used toward college. Twenty-three of them either completely pay their education costs or share the expense with their parents through government loans, grants, and scholarships.

The anonymous comments the students volunteered seem to tell the whole story: "I enjoyed the work and the people...I'm getting experience for the thing I want to do in life...people are nice and the pay is good...the summer program is basically valuable...love the people I work with... the work experience gives one an intimate glimpse at the operation of a large corporation, especially the bad side...some of the nicest and kindest people I have had the pleasure of working with."

As Dan O'Brien said, you can't always please everybody. But each summer, hundreds of students return to school a little richer—with money in their pockets, and practical experience for the future.

service milestones

35

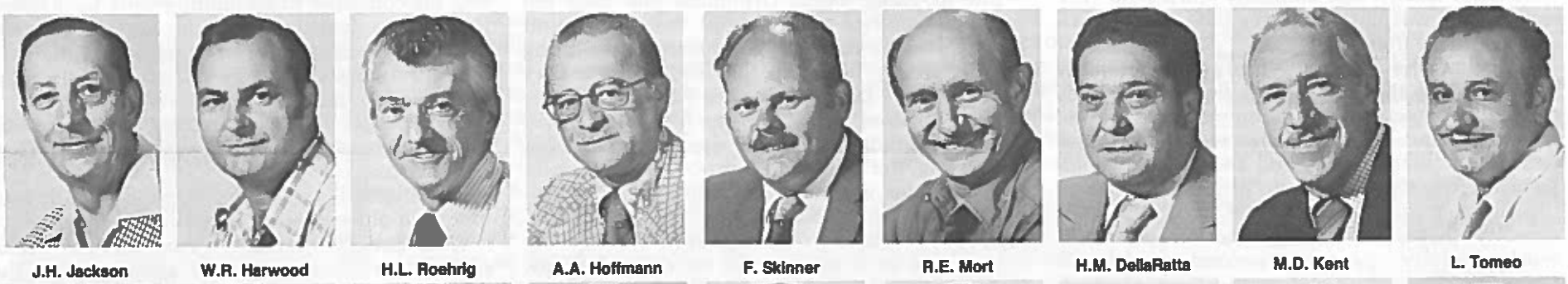
Sherman Renton Jr., PPO—F-14 (1)
Arthur R. Ginnever, Steel Pts. Assy. (2)
Lawrence C. Renton, Flt. Ops/Gulf O&R (4)
Frank P. Mladinich, L.I. Ops. Mgt/Stf. (5)
Andre Hubbard, Sec. & Pers. Serv. Mgmt. (28)
Helen A. Holzapfel, Training & Dev. (39)
Sydney Wilson, Prog. Contracts (77)

30

Herbert F. Oldehoff Jr., Major Assy. (1)
Gordon R. Emmons, Conv. Mach. (5)
Wilbert J. Buck, QC Lab. (10)
George A. Drab, Tech. Req. (25)
John M. Morrison, Fluid Power (35)
Andrew Shreeves, Tech. Ops. (77)
Patrick J. Dugan, Production (88)

25

John H. Jackson, Fuse. Assy. (1)
William R. Harwood, Fuse Fwd. Sub. & Maj. (1)
Robert H. Fortin, Final Assy. (1)
Harry L. Roehrig, Prod. Supervision (1)
Albert A. Hoffmann, Method Engg. (1)
Fred Skinner, Maint-Rearrangement (1)
Robert E. Mort, Maint-Rearrangement (1)
Hilaire M. DellaRatta, Prog. Mgmt. F-14A (1)
Milton D. Kent, Configuration Data Mgmt. (1)
Louis Tomeo, Press (2)
Nicholas R. Martino, Cadmium Plate (2)
Robert A. Ford, Cadmium Plate (2)
John P. Chacalos, Steel Pts. Assy. (2)
Nat P. Menna, Hydraulics (2)
Kurt F. Haake, Prod. Ctl-Pts. Cntl. (2)
Arthur R. Garmendia, Floor Space (2)
Robert T. Ryan, Tool Control (2)
Anthony J. Bianco, Cent. Storage & Retrieval (2)
Frank W. O'Neill, Press (3)
Fred Cassese, Engraving (3)
Albert C. Brecht, Engraving (3)
Stephen T. Siragusa, Chem. Mill (3)
William F. Flynn, Wing Final Assy. (3)
Kenneth J. Lampel, N/C Machines (3)
Ulysses Smalls, Honeycomb Prefit (3)
Frank Francioli, Honeycomb Prefit (3)
Lloyd N. Miller, Honeycomb Prep. (3)
Garry C. Barker, Honeycomb Final (3)
James McDonald, Honeycomb Bonding (3)
Adolph J. Vnook, Prod. Rel. & Analy. (3)
James M. Barnes, Methods Engg. (3)
Stephen Sally, Maint-Rearrangement (3)
Milton N. Kramer, Insp-Mech. (3)
John B. Phillips, Insp-Mech. (4)
William Fehrs Jr., Comm. & Spec. Prod. (4)
Louis Lupoli, Final Assy. (5)
Richard A. Guarino, Sub-Assy. Maj. (5)
Hilton Howard, Static Test (5)
Alex Zubchenok, Support Equip. Prod. (5)
William G. Strozak, Pl. 14/26—Inst. Mgmt. & Stf. (5)
John Mayall, Prod. Ctl-Pts. Cntl. (5)
Robert W. Washington, Presentation Serv. (5)
James Foley, Maint-Rearrangement (6)
Vincent J. Valetutti, Mgmt. & Stf. (6)
Hans Kalle Jr., Plant Stores (6)
Franklin W. Gilmore Jr., Ships & Spares Consolid. (6)
Robert W. McGlone, Repair Control (6)
Francis L. Rath, Mach. Shop (6)
Leroy J. Lawlor, Jigs, Dets. & Sub-Assy. (6)
Charles R. Cava, Flight Ops. (7)
Frank Morosky, Maint. Admin. (12)
Charles F. Karpinski, Maint-Rearrangement (12)
Francis S. Brauer, Mat. & Proc. Mgmt. & Stf. (12)
Robert L. Blackshaw, Adv. Matl. & Process Dev. (12)
Charles H. Waldeck, B/P Warehouses (17)
Edward F. McNiff, Cent. Shipping Pkg. (17)
August Nielsen, Plant Protection (18)
Vincent Magnussen, Trans. Office (20)
Richard W. Spader, Rec-Insp-Plng/Methods (24)
Allan E. Dooley, ILS Commodities Cntl. (25)
William S. Grecz, Tech. Req. (25)
Henry C. Bell, Specifications (25)
Francis Nichols, Sub-Assy. (27)
Stephen Kalman, Field Admin. & Liaison (28)
Robert E. Amott, Corp. Security (28)
Charles W. Schwalbe, Arch. Engg. (30)
Walter A. Scheu, Materials Acctg. (30)
Robert H. Knatz, ILS Tech. Writing (34)
Fred E. Knapp, Sys. Engg. Mgmt. & Stf. (35)
Harry Chocheles, Insp-Mech. (35)
Harry Aufderheide, Sub-Assy. (36)
George Burt, Center Sect. Final (36)
Angelo Cassella, Center Sect. Final (36)
Frank A. Portoghese, Maint-Facl. Equip. & Gen. (36)
Harry L. Foster, ILS Tech. Serv. (40)
Frederick Timmerhans, Mech. Struct. & Assy. (43)
John A. Desotle, Mech. Struct. & Assy. (43)
Francis A. Law, Elect. Final Assy. (43)
William Caniano, Mfg. Supervision (43)
Irving L. Pedrick, Administration (43)
Earl Seagle, Insp. Elect. (43)
William B. Beetle, Prod. Mgmt. Ops/Stf. (77)
Felix S. Cusa, Inspect/QC (77)
Louis P. Parrella, Iran
William R. Burke, Sub-Assy. (77)



J.H. Jackson | W.R. Harwood | H.L. Roehrig | A.A. Hoffmann | F. Skinner | R.E. Mort | H.M. DellaRatta | M.D. Kent | L. Tomeo

R.A. Ford | J.P. Chacalos | N.P. Menna | A.R. Garmendia | R.T. Ryan | A.J. Bianco | F.W. O'Neill | F. Cassese | A.C. Brecht

S.T. Siragusa | W.F. Flynn | K.J. Lampel | U. Smalls | F. Francioli | G.C. Barker | J. McDonald | A.J. Vnook | J.M. Barnes

S. Sally | M.N. Kramer | W. Fehrs Jr. | L. Lupoli | R.A. Guarino | H. Howard | A. Zubchenok | W.G. Strozak | J. Mayall

Jerome Presepio, Sub-Assy. (77)
Arthur F. McDonald, Offsite Support (86)

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Maurice Cavallaro celebrated his 25th anniversary with Grumman Aerospace in July. Unfortunately his photo was not processed in time for the July issue of PLANE NEWS. Maurice works in Material Shortage Control department in Plant 30. Happy 25th, Maurice!

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Roy Montana, Program Mgmt. (1)
Roy Decker Jr., Repro Serv. (1)
Robert Montusi, Environ. Cntl. Des. (1)
Nicholas Hadjigeorgio, Crew/Equip. Integration (1)
Benedetto Palazzolo, Stockrooms (2)
Robert D. Breuer, QC Lab. (3)
Michael J. Pepe, Crew/Equip. Integration (5)
Anthony Frank, Environ. Dynamic Test (5)
Francis McNally, A/C Programs (6)
Harry J. Ryan Jr., Struct. Sys. Prod. Support (6)
William L. Horne, Trans-Ops. (7)
John Berdinka, Airport Ops. (7)
Richard N. Orr, FTT Tech. Support (7)
William E. Parente, FTT Tech. Support (7)
Robert Kramisen, ILS Mech. Engg/Des. (15)
Michael Sabia, ILS Req. Def. (15)
Victor C. Resmini, Specifications (15)
Kenneth E. Kinsel, Plt. Protection (18)
William F. Cuppinger, Plt. Protection (18)
Lawrence E. Lorentzen, Drafting (25)
John D. Alber, Prog. Mgt. A-6 (25)
Harold N. Clifton, Gen. Commodities (30)
Jerome G. Rainford, Invoice Audit (30)
William Clark, Dynamics (35)
Herman R. Clark, Insp-Mech. (35)
Edward Moles, Training & Dev. (39)
Robert E. Geisel, Elect. Des. (40)
George F. McKendrick, Maint-Facl. Equip. & Gen. (44)

15

Lawrence J. Farrelly, Production Supervision (1)
Charles F. Motzer, Prototype (2)
George M. Melzer, Cutter Grinder (2)
Ronald Ibanez, Small Pts. Fab. (3)
Anthony T. Ziccardi, Honeycomb Final (3)
John J. Morgan, Flt. Avionics (4)
Robert W. Ossenfort, Support Equip. Prod. (5)
Louis L. Sokol, ILS Sys. Tech. Proj. Mgt. (5)
Theodore S. Gordan, Computer Interface (5)
Catherine G. Danza, L.I. Ops., Mgt/Stf. (5)
Norman A. Beal II, Engines (6)
Samuel Moffett, Elect. Installation (6)
Edward J. Flanagan Jr., ILS Digital Engg. (7)
Harold J. Sheprow Jr., A/C Programs (7)
Joseph F. Jasuta, Maint-Rearrangement (12)
Dennis L. Carter, Ops. Software Dev. (14)
Russell Yuen, Proto Elect. Dev. (14)
Lawrence P. Kollender, ILS Prog. Mgt. (15)
Joseph R. Kriklava, Plt. Protection (18)
Harry E. Kuhlman, ILS Supply Ops. Proj. Mgt. (25)
Barnett S. Green, Trajectory Analy. (25)
Thomas E. Bryant, Tech. Req. (30)
Robert E. Moseley, Claims & Adj. (30)
Jerome A. Salvato, ILS Tech. Illus. (34)
Alfred R. Tobie Jr., ILS Qual. Controls (34)
Anna S. Schweitzer, Secretarial Serv. (35)
Stanley J. Pancir Jr., TS Mfg. Elect. Fab. (36)
Donald E. Porter, TS Mat'l. Req. Plng. (36)
Graydon A. Burns, ILS Field Serv. Mgt. (40)
Robert W. Lamberson, Prod. Control (43)
James W. Smart, QC Engg. (43)
George G. Rooney, Material M/S (44)
George T. Keefe, Jet Engine (60)
John A. Bacheller, PSS Housing & Property Cntl. (60)
Dennis V. Frasca, A/C Sys. Serv. (94)
Lawrence E. Johnson, A/C Sys. Serv. (94)

An Athletic Tip

Now that the Grumman Athletic Association (GAA) has completed its move to roomier quarters in the old Credit Union building outside of Plant 2, Grummanites are reminded that when sending interplant mail to GAA at Bethpage, simply indicate "GAA" in the "Plant No." space on the envelope.

J. Foley | V.J. Valetutti | F.W. Gilmore Jr. | R.W. McGlone | F.L. Rath | L.J. Lawlor

C.R. Cava | F. Morosky | C.F. Karpinski | F.S. Brauer | R.L. Blackshaw | E.F. McNiff | A. Nielsen | V. Magnussen | A.E. Dooley

W.S. Grecz | H.C. Bell | F. Nichols | S. Kalman | R.E. Arnott | C.W. Schwalbe | W.A. Scheu | R.H. Knatz | F.E. Knapp

H. Chocheles | H. Aufderheide | G. Burt | A. Cassella | F.A. Portoghese | H.L. Foster | F. Timmerhans | J.A. Desotle | F.A. Law

I.L. Pedrick | E. Seagle | W.B. Beetle | F.S. Cusa | L.P. Parrella | W.R. Burke | J. Presepio | A.F. McDonald | M. Cavallaro

Medical insurance helps trim costs of health-care

Most people need help to survive the rising costs of hospital and medical care. Take the case of Paul D., for example, who was hospitalized for three weeks for heart surgery. His total hospital stay, costing $4,306.76, was paid for in full under the Grumman Basic Health Plan, according to Dolores Stierle, a supervisor in the Insurance Department. It included the cost of such items as use of the operating room, intensive care, room and board, surgical supplies, laboratory tests, and x-rays. The only charges not included were telephone and TV fees.

$100 deductible

While he was at the hospital, his doctor's bill came to $590, of which $225 of the bill was paid for by the Basic Plan. Since he had satisfied the $100 deductible requirement prior to his hospitalization, the Major Medical Plan paid 80 percent of the remaining $365. The only cost to the patient was $73.

The employee's heart surgery bill—$2,500—was almost completely paid by the medical insurance plans. The only portion not covered was $275—the 20 percent each person is liable for under the Major Medical Plan. After his release from the hospital, the Plan also paid 80 percent of the employee's doctor visits and prescription bills. That amounted to $60. All told, the Group Insurance Medical Plan expended $7,108.76 in claims for Paul D.'s illness.

Medical Group Insurance includes both the Basic Health and Major Medical Benefits Plans. The Basic Health Plan provides for the normal medical expenses of an employee or dependent during the first 365 days of hospitalization for an illness in semi-private accommodations. Most hospital services, says Stierle, are included under the plan. Charges for surgery, whether performed in or out of a hospital, are paid according to a schedule having a $1,500 maximum allowance. If an employee has an emergency accident and it's treated within 72 hours, as a hospital outpatient or in a doctor's office, a benefit is payable up to $100 that includes any additional treatment that's needed within six weeks.

Provides back-up

While the coverage provided under the Basic Plan for normal medical expenses is very helpful, it is still backed up by a Major Medical Plan that helps meet the unusual expenses of a prolonged illness. This Plan provides a major portion of the additional payments needed for hospitals' and doctors' services, and includes all types of reasonable medical expenses. It even includes such expenses as special nursing care, medical appliances, and prescription drugs and medicines.

Claim helper. Betty Teale, claims department insurance coordinator, assists Joseph Pellegrino, Plant 3 machine shop, with claim form. During 1975, processed claims accounted for 87,000 benefit payments made for employees and dependents. (Photo by Marie Trimborn)

After the benefits of the Basic Health Plan have been used up, the employee is liable for the next $100 of a medical bill. Then, Major Medical pays for 80 percent of the remaining covered expenses of the bill up to a maximum of $50,000. The cost of the coverage provided by the insurance plans is borne entirely by the company.

Claim forms

If any persons have questions about their own coverage or that of their dependents, there are seven insurance coordinators in the Claims Department at Grumman, Plant 28, ready to listen and give answers. As Gloria Lindergren, group leader of the claims section, says, "People should call us for information about their medical insurance. It's sometimes hard to understand everything in the insurance booklet, and the amount and type of coverage changes from time to time."

Claim forms that are needed to start the process of applying for covered benefits are available at any Employee Service office or the Insurance office, Plant 28. The forms should always be completed accurately, fully answered, and submitted promptly to insure a quick claim settlement. So if you have any questions about medical coverage, call Ext. 3146 or 3147. It may save you some money.

Fail-safe test contract aids small airline fleet

With the arrival of a Prinair Heron aircraft at Bethpage on June 23, another of the increasing number of small but significant contract agreements now sought by Grumman was set in motion. In this case it is a $300,000 job to static-test one of 25 Hawker-Siddeley DH-114s owned by Prinair, a Puerto Rico-based commuter airline that operates in the Caribbean.

Prinair claims to be the largest U.S. commuter airline by virtue of carrying an average of 19 passengers on some 100 half-hour flights daily. The problem for this busy little airline is that the average service life left in the aging Herons (built in the 1950s) is 17,000 hours. Because the planes are used nearly 2,000 hours annually, their "life expectancy" is less than eight years.

To meet Federal Aviation Administration standards and increase the service life of the Herons, Prinair's president, James Ceresa, contacted Grumman in the hope that the company would run a "fail-safe" test program. Project engineer Cliff Stahl, who is running the static testing, explains fail-safe this way: "It is the ability of the aircraft to sustain structural damage or degradation and continue normal operations safely until the damage is so obvious that it will be detected by routine inspection."

According to Stahl, the tests on the Heron will simulate air loads that occur in flight. Selected damage will be created in the structure and a critical test load will be applied to determine if it can be withstood without further damage occurring. In the static testing that will run through November, 96 tests with 182 elements of damage will be introduced.

A ground vibration survey will precede the static tests. It will be repeated at the end of the program to check that no potential problem has developed because of damages made during the program. When the test program is completed, the aircraft used as a test specimen will be retired from service.

The future of the Prinair company may well rest on the test findings because an investment in new turbo-prop aircraft could prove prohibitive. If successful, the test results and the replacement of certain structural aircraft items will allow FAA certification to be extended for an additional 15,000 service hours. This would insure the continuous service of the Prinair Heron fleet well into the mid 1980s.

Until recently, few tests were run at Grumman for outside companies. Prinair was actually hesitant to approach a large corporation to do such a small test job. But according to Stahl, "We'd like to do more jobs of this kind—small or large—for people with a problem. This could open up a new area of contracts for Grumman."

Preparing next phase. Gluing pads on the tail fin surface of Prinair Heron for applying simulated air loads in static testing are (L) test lab techs Joe Kerwin and Pat Siani. Static test engineer Cliff Stahl confers with Gene Martone, the ground vibration survey engineer.

Begin after-hours fall semester registration

The Training and Development Department will once again be offering a number of after-hours courses this Fall to help Grummanites expand their knowledge and brush up on their skills. Registration is by phone, starting 8 a.m., Monday, August 30, and continuing until 4:30 p.m., Friday, September 3. There are no fees or tuition charges.

The courses listed below are available to all Grumman employees. For some courses, there are prerequisites. You need not have fulfilled a particular prerequisite by taking a voluntary education course—courses taken elsewhere or work experience can prepare you for the more advanced courses.

A minimum of 15 persons must register for each course.

Enrollment is strictly voluntary. You may register by calling the Voluntary Education Office at the extensions listed below. *Please note:* a specific phone extension is assigned for a specific day on which the course is given. Extensions marked with an asterisk (*), will be connected *only during the registration period.* Registration calls will be accepted *ONLY* from 8 a.m., August 30, through 4:30 p.m., September 3, each working day.

Courses in Bethpage and at other sites:

Monday evening courses—call Ext. 84678*

Tuesday evening courses—call Ext. 84684*

Wednesday evening courses—call Ext. 84685*

Thursday evening courses—call Ext. 7350*

All Calverton site courses—call Ext. 6888

Certificates will be issued to those students who have attended at least 80% of the sessions and have achieved the course instructional objectives in a creditable manner. Further information can be obtained by calling the Voluntary Education Office on Ext. 84044.

There are no fees or tuition charges; however, students are expected to purchase their own textbooks. Textbooks may be purchased anywhere, but for student's convenience, the Voluntary Education Office will have textbooks available for purchase through the course instructor.

The following list of courses being offered by Training and Development includes title, course number, description of course, section number (if more than one section is being offered), instructor, location and time of class, and starting date. For registration, refer to title, course number, and section.

Many worthwhile programs of study are also available at your local high schools. Your school district's Adult Education, BOCES, and VEEB programs, offer a variety of courses at all levels: For more information, contact your local school district.

NYS recommends nine courses given by T&D for college credit

The Training and Development department has important news for Grumman employees. Nine courses—five in its Management Development program and four in its Voluntary After-Hours program—have been recommended for college credit by the State of New York, says Gus Lanzo, deputy director of Training and Development. The announcement was made following a project on Non-Collegiate Sponsored Instruction, a joint effort by the American Council of Education and The University of the State of New York.

New York State initiated the project in 1974 to review formal education courses offered by organizations (such as Grumman) whose primary function is not education. Considering it sound educational practice to grant academic credit for quality educational programs being given by industry and business, as well as professional organizations, the Office on Educational Credit sends evaluation teams to examine the courses and recommend them for college credit. According to Lanzo, a team visited Grumman last winter to consider five courses which have been offered by its Management Development Section. The following courses were evaluated and approved for various levels of college credit:

Communication and Motivation (EE01540) - at Bethpage and Calverton facilities, 33 hours, offered from Jan. 1976 to present, upper baccalaureate division.

Management I (EE 01542) - at Bethpage, Calverton, and Great River, 48 hours, March 1975 to present, lower baccalaureate/ division associate degree category.

Management II (EE 01376) - at Bethpage and Calverton, 42 hours, April 1975 to present, upper baccalaureate division.

Fundamentals of Supervisory Management (EE 01541) - at Bethpage, 40 hours, Jan. 1976 to present, lower baccalaureate division.

Senior Management Development Program (EE 01252) - DeServersky Conference Center, Old Westbury, 100 hours, Sept. '75 to present, graduate credit recommendation.

Tom Reid, manager of Management Development, emphasizes that the courses have been only slightly modified to achieve this academic recognition. These courses are still oriented to the needs of Grumman employees. The fact that they have been recommended for college credit is an additional benefit.

Additional credit

The four courses in the company's Voluntary After-Hours Education program recommended for credit are noted in this year's fall academic listing.

If you have taken any of these courses within the time periods stated above and you wish to receive credit from an educational institution, write to Bob Wattenberg, Training and Development business manager, Plant 39. He will supply you with the necessary documentation that can be sent to your college for evaluation. *The credits recommended by the State are not accepted universally by all schools* and must be determined individually at every institution.

COMPUTER SCIENCES

Computer Programming, Introduction to (FF01546—37.5 hrs)

Thirty-seven and one half hours divided into 15 2½ hour lessons. The principles are taught through examples using common programming languages. The languages serve a dual purpose of familiarizing the student with available languages and providing a medium for practice of programming techniques. Languages covered in detail and used for examples are Basic, Fortran and Cobol. Other languages discussed are PL/1, APL and RPG. The lessons will be about 60% lecture and 40% exercise.

Sec. I, R. Sacks, Room 115, Bethpage H.S., 5-7:30 P.M., Wed., Sept. 15.
Sec. II, D. Rothkopf, Room 111, Bethpage H.S., 5-7:30 P.M., Mon., Sept. 13.

Note: As of Spring 1976, this course has been recommended by the State of New York for lower baccalaureate credit.

Computer Programming, COBOL (FF01547—37.5 hrs)

Teach students to solve data processing problems using the COBOL programming language. The two and a half hour lessons will be divided between theory and practice. When practical, the lessons will be equally divided between lecture and practice exercises.

Prerequisites: Introduction to Computer Programming, or equivalent.
B. Abrams, Room 112, Bethpage H.S., 5-7:30 P.M., Mon., Sept. 13.

Note: As of Spring 1976, this course has been recommended by the State of New York for lower baccalaureate credit.

Computer Programming, FORTRAN (FF01548—36 hrs)

To provide instruction for those individuals having a need to express computational problems in the FORTRAN language; and how to operate the IBM 1130 computing system.

Prerequisites: Introduction To Computer Programming, or equivalent.
J. Vosefski, Room 110, Bethpage H.S., 5-7:30 P.M., Wed., Sept. 15.

Note: As of Spring 1976, this course has been recommended by the State of New York for lower baccalaureate credit.

Computers: A Management Tool (FF01549—37.5 hrs)

To increase the participants' awareness, knowledge, and understanding in the areas of information processing and computers as they relate to management, operational effectiveness, planning and organization change.

The general concepts and characteristics of the hardware and software components of information processing systems are presented in addition to the processes and methodologies related to application development, system procurement, and management. Included are topics such as: industry personnel and organization, the system life cycle, software factory, hardware architecture, and input/output devices, resource management, security, computer-aided design, and financial modelling; covering historical development, current state-of-the-art and industry trends.

Prerequisites: Introduction to Computer Programming, or equivalent.
M. Blyseth, Room 112, Bethpage H.S., 5-7:30 P.M., Wed., Sept. 15.

Note: As of Spring 1976, this course has been recommended for graduate credit by the State of New York.

ENGINEERING SCIENCES

Introduction to Microcomputers (FF01544—30 hrs)

A beginning course emphasizing microcomputer principles. This course teaches you the fundamental concepts of microcomputers, what they are and how they work. Computer languages will be explained as well as the basics of programming. Hands on experience will be an integral part of this course through the use of a microcomputer.

P. Burton, Room 111, Bethpage H.S., 5-7 P.M., Wed., Sept. 15.

Integrated Circuits for Engineers I: Introduction to Integrated Circuits (FF00329—37.5 hrs)

Provides a thorough understanding of hybrid ("h") parameters and the fabrication techniques of integrated circuit elements such as resistors, capacitors, diodes and transistors. The introduction to digital circuits will begin by a complete review of Boolean Algebra and DeMorgan's Laws. The digital circuits will be analyzed from a D.C. as well as an A.C. point of view. Various types of coupling will be discussed with an emphasis on the practical aspect of each type. Transistors found in integrated circuits will be analyzed at low and high frequencies and field effect transistors will be introduced.

Prerequisites: Knowledge of electrical engineering, network theory, and transistors.
V. Sanford, Room 110, Bethpage H.S., 5-7:30 P.M., Mon., Sept. 13.

SKILLS DEVELOPMENT

Electricity I (FF00008—40 hrs.)

This is the first in a series of courses in the electrical-electronics training program. Practical laboratory experiments, coupled with related theoretical concepts, develop proficiency in circuit fault-isolation of electronics equipment. Circuits constructed rapidly on vector boards are then tested and analyzed. Subjects covered in this course include: schematic diagram reading, electronics color

Fall courses...

Continued from page 9

codes, series and parallel circuits, and Kirchoff's Laws. Basic electrical test instruments, such as volt, ohm, milliammeters, and oscilloscopes are used throughout.

G. Graf, Room 4, Bethpage Pl. 39, 4:30-7 P.M., Tues., Sept. 14.

Electricity II (FF00009—40 hrs.)

This is the second in the series of courses in the electrical-electronics training program. Practical laboratory experiments, coupled with related theoretical concepts, develop proficiency in circuit fault isolation of electronics equipment. Subjects covered in this course include: schematic diagram reading, power supply circuits, filters, diode rectifier transformers. Basic electrical test instruments, such as volt, ohm, milliammeters, and oscilloscopes are used throughout.

Prerequisite: Electricity I, or Equivalent Experience.

J. Hosek, Room 1, Calverton—Plt. 8, Training Trailers, 4:15-7:15, Wed., Sept. 15.

Electronics I (FF00010—40 hrs.)

Power supply circuits and associated electrical-electronic components constitute the main subjects of this course. Operational theory and practice is provided in circuits such as: transformer and semiconductor power supplies, solid state logic, half-wave and full-wave supplies, voltage doublers, and solid state bridges. Related math is taught, as required, with each experiment. Students also gain experience in the use of basic shop test instruments.

Prerequisites: Electricity I and II, or Equivalent Experience.

S. Biesiadecki, Room 4, Bethpage Plt. 39, 4-7 P.M., Wed., Sept. 15.

Use, Care, and Application of Basic Electronic Equipment (FF01311—40 hrs.)

This course's objective is to provide the student with a capability to select, operate, and read the basic types of test equipment used in the electronics industry. Test equipment safety rules and precautions are stressed. Students master proper care and application of test equipment, practicing on live circuits, demonstrating techniques with the "hands on" approach.

Prerequisite: Electronics I and II or Equivalent Experience.

R. Volino, Training Room, Great River Plt. 43, 4-7 P.M., Tues., Sept. 14.

Integrated Circuits for Technicians (FF00347—30 hrs.)

Provide electronic technicians with the physical and performance characteristics of typical Integrated Circuits. The subject matter will begin with classification of members of the Integrated Circuits (I.C.) family. Characteristics of the various I.C.s, as well as, a "positive logic" review, "negative logic" review, and mechanical considerations will follow. Major subject areas include: linear circuits, I.C. O.P. AMP Applications, linear I.C. packages, digital I.C.s, interfacing problems, testing, FET, LSI circuits, memory and I.C. future trends.

Prerequisite: Experience as an electronic technician.

V. Sanford, Room 2, Calverton—Plt. 8, Training Trailers, 4-6 P.M., Wed., Sept. 15.

PERSONAL DEVELOPMENT

Basic Blueprint Reading (FF00048—30 hrs.)

Instruction covers the fundamentals of print reading, including interpretation of an engineering drawing, dimensions and tolerances, surface finishes, bill of materials, drawing notes, manufacturing processes, and aircraft terminology.

Sec. I, J. DeLorenzo, Room to be announced, Bethpage Plt. 39, 2-4 P.M., Tues., Sept. 14.

OAO reunion. Several old friends of the Orbiting Astronomical Observatory (OAO) gathered at a full-scale OAO model on display at the opening of the NASA-Goddard visitors center in Greenbelt, Md. Present at the event were: John Purcell, Customer Requirements; Ralph 'Doc' Tripp, Executive Vice President and former OAO director; Don Imgram, director of Space Programs and former OAO program manager; Earl Light, OAO Ops at GSFC; and Saul Ferdman, Customer Requirements–Space.

(Night Employee "geared")
Sec. II, J. DeLorenzo, Wyandanch, Plt. 27—Library, 5-7 P.M., Tues., Sept. 14.

Writing and Communication (FF0545—36 hrs.)

Basic purpose is to provide both a philosophy and the mechanics for filling business' three major needs: writing to prescribe, to persuade, and to report. Course consists of lecture, discussion, and workshop.

W. Fleischhaur, Room 112, Bethpage H.S., 5-7:30 P.M., Tues., Sept. 14.

Typing, Beginners (FF00030—30 hrs.)

For those who desire a skill in typing. Through regular classroom practice and drill, students will acquire the necessary keyboard control essential to good typing techniques.

C. Weiner, Room 109, Bethpage H.S., 5-7 P.M., Wed., Sept. 15.

Reading Improvement (FF00030—30 hrs.)

For the average or above average reader who wishes to read more efficiently. Through Systematic classroom exercises, the student will increase substantially his/her reading speed and comprehension.

G. Ballard, Room 113, Bethpage H.S., 5-7 P.M., Mon., Sept. 13. (Meets on Mon./Wed.)

High School Equivalency (FF00016—60 hrs.)

Instruction, review, and preparation for taking the High School Equivalency test. Areas of concentration: Mathematics, Science, English, Social Studies.

Prerequisite: 18 years of age or older; out of school at least one year.

Sec. I, J. White, Room 114, Bethpage H.S., Mon., Sept. 13. (Meets on Mon./Wed.)

Sec. II, A. Pallas, Room 3, Calverton, Plt. 8, Training Trailers, 4:15-6:15 P.M., Mon., Sept. 13. (Meets on Mon./Wed.)

Gregg Shorthand, Basic (FF00835—30 hrs.)

This course, which is geared to aerospace industry, will introduce the student to the basic shorthand concepts and accomplish dictation speeds up to 60-80 words per minute. This course is intended for those who have little or no background in Gregg Shorthand and is designed to introduce the student to basic concepts through dictation and transcription.

Prerequisites—None

Sec. I, M. Wolfe, Room 113, Bethpage H.S., 5-7 P.M., Tues., Sept.

Sec. II, M. Wolfe, Large Chart Room, Time and Day to be announced, Garden City, Plt.

Voluntary Education enters a new field with these self-instructional courses. Registration varies somewhat from the other courses in Voluntary Education since you take these subjects by yourself while seated at a study carrel in one of our Learning Centers.

When you report to the Learning Center, a representative from Training and Development will give you the required workbooks and associated material. You will be instructed in the use of the equipment necessary to take the course. Once this is accomplished, you may begin the course and proceed at your own rate. Sessions are to last approximately 2 hours. The program materials must then be returned to the Learning Center Library until the next session.

Please Note: you may register for automated programs throughout the year. Availability of study carrels will be the governing factor.

Industrial Conversion to the Metric System (AT01320—6 hrs.)

Designed to provide an understanding of essential elements in the metric system, this course will enable you to deal confidently with metric terms, measurements, and conversions. The knowledge gained in this course will help you assist your children with their homework while it prepares you for the country's eventual conversion to the metric system.

Spanish, Basic Course (Unit 1-15) (AT00297—150 hrs.)

This basic course in Conversational Spanish will focus on pronunciation problems, basic dialogs, and conversations between the taped program and the student. All areas of this course are supported by drills which aid the learning process.

Because this course is being offered on a trial basis, we will be limiting it to the first who register. In Bethpage, the first ten (10) to call will be accepted: in Calverton, the first six (6).

Learning Centers: Plant 39, Bethpage—ext. 84044

Plant 06, Calverton—ext. 6888

calendar

Aikido Club: every Mon. & Wed., 5:15 p.m., Pl. 35 cafe; Japanese Martial Art; L.I. Aikido Federation; all guests welcome. Bob Bauman, x3886/Mike Stock, x84014.

Alcoholics Anonymous: every Mon., 5 p.m., Pl. 39, classroom 1; closed mtgs. Personnel Relations, x3521; **Calverton:** every Mon., 4-5 p.m., Pl. 8 trailer.

Amateur Radio Club: Wed., Sept. 15, 5 p.m., radio shack, roof of Pl. 5; local chapter; guest speaker from American Radio Relay League; guests welcome. Emmett Goodman, x87125.

Chess Club: every Tues., 5 p.m., Pl. 30 cafe; guests welcome. Pat Charovkine, x9387.

Coin Club (Bethpage): Wed., Aug. 28, 12:05 p.m., Pl. 25 vendor conference rooms; informal lunchtime meeting. Ken Hale, x3717.

Coin Club (Calverton): every Fri., 1st lunch period, instrumentation conference room, Pl. 6; visitors welcome.

Duplicate Bridge Club: every Thurs., 6 p.m., Pl. 30 cafe; open competition; guests welcome. Sid Stone, x6483/Frank O'Lear, x7336.

Fencing Club: every Mon., 4:30-6:00 p.m., Pl. 30 cafe. George Kegney, x86048.

Folk-Dancers Club (Calverton): every Tues., Thurs. lunchtime, receiving area, Pl. 6; all welcome. Virginia McGoey, x517-6770.

Grumman Dance Club: every Thurs., 5-7 p.m., Pl. 28 auditorium; hustle, folk, & ballroom dance lessons; all welcome. Marvin Brown, x87307.

Grumman Scuba Divers Club: Wed., Sept. 1, 5 p.m., Pl. 28 auditorium; all welcome. Cindy Schlicter, x6120.

Grumman Model Railroad Society: every Wed., 5:30-9:30 p.m., Model RR Bldg. (at Pl. 3 rr crossing); reg. mtg.; guests welcome. Ray Muntz, x86101.

Rod and Gun Club: every Mon., 4:30-9:30 p.m., NYS Armory, Riverhead; 1st & 3rd Mon., 8-10 p.m., Naval Reserve Training Center, Huntington; every Tues., 4-9 p.m., Levittown Range; every Thurs., 6-10 p.m., Old Bethpage Club Range, W. Babylon; every Fri., 6-8:30 p.m., Marine HQ Range, Garden City; practice & matches; open to all Grummanites. Frank Bannwarth, x7705/Charles Reed, x7711.

Society of Mfg'g Engineers: Mon., Sept. 13, 7:30 p.m., Polytechnic Institute of N.Y., L.I. Center, Rte. 110, Farmingdale; local chapter; guest speaker: R.M. Collins, GAC — "Non-Destructive Testing of Advanced Composites;" guests welcome. Bob LaManna, x3947.

Stamp Club: 1st, 2nd, 3rd Wed. of each month, 4:45 p.m., Pl. 30 cafe. Steve Hoops, x87451.

GRUMMAN **plane news**

Published twice a month for the employees of Grumman Aerospace Corporation, Bethpage, N.Y. 11714, as a function of the Public Affairs Dept., Vice President Sandy Jones, director.

Manager, Internal Communications
Brian Masterson

Associate Editors
Kathy Housley
James B. Conaway
Charles McGowran

Editorial Assistant
Laura Solla

Reporter
Brian Ballweg

Telephone
Plane News: 3293
Plane News from outside line: 516-575-3293

scorecard

Before completing her summer assignment in Plant 30 Accounting, Laura Stanonis soundly defeated all her opponents in the first GAA Women's Tennis Open. The Penn State sophomore was

Laura Stanonis

victorious over Regan Keeler, Kathy Housley, and Dorothy Kouwenhoven before meeting Irene Gentile in the final round. Laura, daughter of Millie Stanonis, Grumman Corporation, completed her sweep of the 1976 tourney by winning her match against Gentile, 6-4, 6-1.

In the doubles division of the Women's Open, Kouwenhoven and Gentile fared much better.

Irene Gentile and Dorothy Kouwenhoven

Playing as a team for the past three years, the two varsity members knocked off Annette Frisch-Pat Corino, and Penny Baldassare-Marie Wood to earn a slot on center court. In the finals, they met fellow varsity players Mary Mickol and Barbara Trapani, but the Gentile-Kouwenhoven duo proved too powerful and captured the 1976 doubles title, 6-1, 6-0.

Initiate tennis club

There will be a meeting for all those persons interested in starting a tennis club on Thursday, September 9, in the Plant 28 auditorium at 5 p.m. For further information, contact Chet Baumgartner in the GAA office, Ext. 2133 or 2269.

Suppa performance!

Willie Suppa did it again! For the second year-in-a-row, Suppa of Transportation won the annual GAA Golf Championship and Kickers Tournament. Over 130 Grumman golfers conceded that the Hampton CC course was a good test of skill and they gave Suppa a big hand when tourney director Mike Cherry announced that the former varsity member had carved the course for low gross score of 38-40-78.

Last year, Howard Fraser lost seniors' low gross honors in a match-of-cards, but this year he carded an 84 to win the '76 seniors' title.

It was the same for Pat Cherry. In the '75 contest he tied with two others in the men's low-net category, only to lose in match-of-cards. But, by shooting 72 (79-7), he, too, captured the award that evaded him at the last outing.

Earning the women's low net crown was Nikki Wright. She fired 77 (118-43). After a match-of-cards, Kathy Housley finished in second place with her 77 (107-30).

Other golfers cited were: Jim Alverson, second low-gross, 40-41-81; Tony Uravitch, senior low-net, 72 (85-13); Bernie McCaffery, second low-net, 72 (85-13); Tom Burkhard, longest drive; Vivian Dooley, closest-to-pin, women; and John Glozek, closest-to-pin, men.

Ken and Lynda Prager won Mixed Pinehurst No. 2 on July 21 by shooting a 45 on the Bethpage Blue. Always in the top five for the 9-hole competition, they last won the Pinehurst title in August 1974–one month before they were married.

All smiles. Members of the Plant 3 All-Star team happily pose with their first place trophy earned in the GAA Bethpage lunchtime softball All-Star game.

Plant 3—No. 1

Plant 3 All-Star team manager Tom Marino quipped: "It was total teamwork—and superior ballplayers." That may be a biased opinion, but the scoreboard speaks for itself—the Plant 3 squad defeated both Plant 1 and Plant 2 in the first GAA Bethpage All-Star Lunchtime Softball tourney for the 1976 Title.

The Plant 2 squad had trouble with Plant 3's powerful offensive line-up, losing 2-16. Top sluggers for the victors were Chris Hofman, Bill Arnold, and Sal Calixto, who contributed two, two, and four RBIs, respectively. Shortstop Dominic Verini slammed a three-run homer. Jack Hooper was the winning pitcher.

It took the Plant 3 All-Stars a little more time to dispose of their Plant 1 opposition. Playing the second half of the game on the Plant 1 field, the champs saw their three-run lead slip to 3-3 tie in the top of the fourth. The home team earned all its runs by slugging the ball onto the runway. But the Plant 3 crew learned fast, and at their turn at bat, once again went into the lead, 5-3. Leftfielder Vinny Perniciaro sewed up the championship by blasting a three-run homer.

All-day Pinehurst

Participation in the GAA Mixed Pinehurst tourneys has grown to such proportions that tourney director Mike Cherry decided to organize an all-day golf outing for September 28. The Mixed Pinehurst Championship 18-hole tournament will be held at Colonie Hill C.C. In addition to the traditional kickers prizes, there will be awards for first- and second-place low-gross team scores; and first- and second-place in low net.

The golf affair, which starts at 9 a.m., costs $8 per person. Carts are available for $12 per team (plus tax). Cherry recommends that you register early for the event. Full payment is to be made at registration.

Keglers needed

According to league secretary Ernie Neves, the Black bowling league will be expanding to 16 teams this season. The 4-man team action takes place every Wednesday at 6:30 p.m. at the Woodbury Lanes. Call Ernie on Ext. 86924 if you wish to join.

Varsity duo Jim Minsky (L) and Tony Cisco teamed up to win the 9th Annual L.I. Industrial Recreation Association Golf Tournament. Minsky (77) and Cisco (78) combined efforts to score low gross of 155.

Plan ahead

Attention all hobbyists, artists, and photographers! The 1976 GAA Hobby Show is scheduled for the week of October 11 and this year's Art/Photo Show will be held the week of November 15.

Tournament Entry Form

☐ Paddleball ☐ Horseshoes ☐ Handball — Single ☐ Handball — Doubles

Name _____ Ext. _____

Plant _____ Dept. _____ Perm. No. _____

Partner's Name: _____ Ext. _____

Plant _____ Dept. _____ Perm. No. _____

Entry deadline, September 17
(Forward to GAA, Plant 30)

Everything you always wanted to know about ad supplement

Recently, some people who submitted At Your Service forms for publishing in the PLANE NEWS weekly Ad Supplement have received them back as unacceptable. In an effort to save future phone calls, the following information is offered in answer to some of the most often asked questions regarding advertisements.

Placement of ads is a free service to Grumman personnel only, and on a non-commercial basis. Ads offering large quantities of one article as well as for commodities of an outside business will not be accepted, even if such articles are owned by Grummanites.

Ad forms—items must be priced at $10 or more—can be obtained at Employee Services offices and must be filled out in full before they are sent to PLANE NEWS in Plant 5. One ad category is accepted from each person submitting a form for an issue, although as many as three items can be described in one category (35 words or less, however). But, for example, if two items offered fall under Home Furnishings while a third comes under Recreation, the three cannot be placed together under Miscellaneous because they clearly fall into set categories. The Miscellaneous heading is strictly for items that are not covered by the established categories—such as a diamond ring or baby carriage. Be-

Advertisements are run in each issue of the Ad Supplement in the order they arrive and generally reach print two weeks later. A backlog caused by unusually large numbers of submittals can cause a delay, but the order received is maintained and all acceptable ads will be published in a later issue. If it doesn't appear immediately, please be patient, don't call until it's more than 2-3 weeks after submittal.

One of the least understood areas regards animals. Ads for litters of puppies, kittens, or rabbits are accepted when they are given for adoption only. Single pups, cats, or hamsters can be placed under the For Sale heading one-time only. We consider ads from animal breeders to be commercial.

Except in the Ride Wanted category (which is work-related), Grumman extensions and names of those making submittals are not printed with ads. They must be included in making out the form, however, in case further information is required by PLANE NEWS.

So to avoid the delay that comes with having a form returned, be certain to check the correct category and make sure that what you want meets the publishing requirements. In fact, why not clip this out and keep it on file.

Grumman hams on constant vigil during Belle's visit to L.I.

Amid the whistling winds and heavy rains of Hurricane Belle, members of the Grumman Amateur Radio Club maintained a constant home vigil, searching the airwaves for distress calls.

Aiding them in their efforts was the club's two-meter FM repeater, which is situated in the "ball room" atop Plant 5. Capable of receiving even the weakest voice signals from mobile and stationary ham radios in Nassau and most of western Suffolk counties, the repeater remained on throughout the night.

One of those members who maintained an all-night alert was club president Skip Courtney (K2UAT). He explains the function of the repeater this way:

"The two-meter FM repeater is both a receiver and simultaneous transmitter, which receives signals on 146.145 megahertz (mhz) and transmits on 146.745 mhz," Courtney said. Any station transmitting on the unit's receiving frequency, even one with the weakest signal, he noted, will have its message picked up and immediately rebroadcast over the transmitting frequency. The signal will then be picked up by either a club member monitoring the frequency, or by another local ham operator tuned to the signal.

While the repeater was on the air during the hurricane, Courtney said, almost apologetically, that "it didn't help save any lives." But he quickly added that it was fortunate that it didn't have to.

Normally, the unit is turned on from 6 a.m. to midnight every day. Because the law states that the unit must be monitored at all times, several club members have portable hand-held rigs with them in their plants where they work. The unit atop Plant 5 can be turned on and off, automatically, by telephone.

The repeater has been on the air officially since November 1974, and Courtney said that club trustee Dave Goldblum (W2ZBJ) has used the unit several times to report accidents he has spotted from his car.

The advantage of having such a unit based at Grumman, Courtney emphasized, is that it is a "good receiver, in a good location, with a good antenna" capable of picking up even the weakest signals. Some of the components, including the antenna and duplexer (which allows you to use the same antenna to transmit and receive) were built by several of the club members.

While there are only about 28 active members in the club itself, Courtney said the club has a mailing list in Grumman of over 200 people. Beside himself, Courtney said that Ray Neubeck (W2ZUN) and retirees George Klaus (W2CJN) and Cliff Goff (K2KSP) also kept listening during the storm for anyone who might have needed help.

While the two-meter FM unit at Grumman isn't the only repeater in the neighborhood, it should be a comforting thought for ham radio operators to know that help is probably there whenever they need it.

Slate tourneys for Sept. 27

GAA has announced that play will start on Monday, September 27, in the annual paddleball, horseshoe, and handball tournaments. Applicants for the tourneys are requested to fill in the accompanying form and mail it to GAA office no later than Friday, September 17.

All applicants who do register for the tourneys will receive further information from GAA on time, location, and rules of the tournament.

Tip on tires

A tire that's underinflated by only four pounds will have a 10 per cent decrease in treadlife—and if it's 12 pounds underinflated, its life span drops a whopping 40 per cent, according to the Department of Commerce.

GRUMMAN plane news

ADDRESS CORRECTION REQUESTED

BULK RATE
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PERMIT NO. 264

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